

67,200-1248
2003-1295

ABSTRACT OF THE DISCLOSURE

A split-gate, P-channel flash memory cell having a band-to-band hot electron (BBHE) programming method is defined to improve the endurance characteristics of performance of the cell. The split-gate, P-channel structure, which includes a P+ drain, P+ source, floating gate and a control gate, advantageously improves protection from over-erase and hot-hole trap conditions, and improves programming speed and higher injection efficiency. The cell is erased by a polysilicon-polysilicon tunneling technique.